

STATIONARY SOURCE PERMIT TO MODIFY AND OPERATE

This permit supersedes the permit dated June 9, 2005.

In compliance with the Federal Clean Air Act and the Commonwealth of Virginia Regulations for the Control and Abatement of Air Pollution,

Stihl Incorporated
PO Box 2015
536 Viking Drive
Virginia Beach, Virginia 23452
Registration No.: 60995
AFS Id. No.: 51-810-00044

is authorized to modify and operate

an outdoor power equipment manufacturing facility

located at

536 Viking Drive
Virginia Beach, Virginia

in accordance with the Conditions of this permit.

Approved on **January DRAFT, 2007.**

Francis L. Daniel

Permit consists of 8 pages.
Permit Conditions 1 to 23.

INTRODUCTION

1. This permit approval is based on the permit applications dated April 20, 1998, July 31, 1998, December 13, 2002, April 15, 2005, and August 2, 2006, including amendment and supplemental information dated May 21, 1998, May 27, 1998, June 3, 1998, June 15, 1998, September 3, 1998, October 14, 1998, December 18, 1998, December 23, 1998, January 16, 2003, March 25, 2003, April 23, 2003, May 4, 2005, September 11, 2006, October 13, 2006, October 31, 2006, November 7, 2006, November 8, 2006, and November 9, 2006. Any changes in the permit application specifications or any existing facilities which alter the impact of the facility on air quality may require a permit. Failure to obtain such a permit prior to construction may result in enforcement action.

Words or terms used in this permit shall have meanings as provided in 9 VAC 5-10-10 of the State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution. The regulatory reference or authority for each condition is listed in parentheses () after each condition.

Annual requirements to fulfill legal obligations to maintain current stationary source emissions data will necessitate a prompt response by the permittee to requests by the DEQ or the Board for information to include, as appropriate: process and production data; changes in control equipment; and operating schedules. Such requests for information from the DEQ will either be in writing or by personal contact.

The availability of information submitted to the DEQ or the Board will be governed by applicable provisions of the Freedom of Information Act, § 2.2-3700 through 2.2-3714 of the Code of Virginia, § 10.1-1314 (addressing information provided to the Board) of the Code of Virginia, and 9 VAC 5-170-60 of the State Air Pollution Control Board Regulations. Information provided to federal officials is subject to appropriate federal law and regulations governing confidentiality of such information.

PROCESS REQUIREMENTS

2. **Equipment List** - Equipment at this facility consists of the following:

Reference No.	Equipment Description	Rated Capacity	Original Permit Date
M1295	Aqueous degreaser		June 9, 2005
M1296	Aqueous degreaser		June 9, 2005
Test Cells	Engine test cells, multiple units	15.2 gallons/hr, combined	January 4, 1999
BF1	Natural gas and hydrogen brazing furnace	0.18 mmBtu/hr	May 4, 2004 (exemption)
M021	Natural gas-fired boiler	5.055 mmBtu/hr	
M653	Natural gas heat treat washer boiler	0.33 mmBtu/hr	
M864	Natural gas heat treat washer boiler	0.33 mmBtu/hr	
M355	Natural gas/propane heat treat furnace	600 cubic feet/hour	
M349	Natural gas/propane heat treat furnace	600 cubic feet/hour	
TK1	Fixed roof horizontal tank; gasoline	1,000 gallons	
PTF	Gasoline loading rack	120 gallons/hour	
MS1	Mineral spirits	2000 gallons/year	December XX, 2006

TP1	Tampo printing operation	1,753 kg/year (3,865 lbs/year)	December XX, 2006
M-1600	Natural gas/propane heat treat furnace	118 cubic feet/hr	December XX, 2006

Specifications included in the permit under this Condition are for informational purposes only and do not form enforceable terms or conditions of the permit.
(9 VAC 5-80-1180 D 3)

3. **VOC Work Practice Standards** – At all times the disposal of volatile organic compounds shall be accomplished by taking measures, to the extent practicable, consistent with air pollution control practices for minimizing emissions. Volatile organic compounds shall not be intentionally spilled, discarded in sewers which are not connected to a treatment plant, or stored in open containers, or handled in any other manner that would result in evaporation beyond that consistent with air pollution practices for minimizing emissions.
(9 VAC 5-50-20 F and 9 VAC 5-80-1180)

OPERATING LIMITATIONS

4. **Fuel** - The approved fuel for the test cells is unleaded gasoline mixed with lubricant oil (at a ratio of gasoline:oil = 20:1 to 50:1, approximately). A change in the fuel may require a permit to modify and operate.
(9 VAC 5-80-1180)
5. **Fuel Throughput** - The test cells shall consume no more than 66,429 gallons of gasoline per year, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
(9 VAC 5-80-1180)
6. **Throughput** - The throughput of **new** Cerfa-Kleen 3550 or similar aqueous cleaning solutions containing up to 30% non-HAP VOC used in the degreasers (Unit Ref. No. M1295 and M1296) shall not exceed 2,400 gallons per year, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
(9 VAC 5-80-1180)
7. **Throughput** - The throughput of mineral spirits as wipe cleaner and degreaser shall not exceed 2,000 gallons per year, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
(9 VAC 5-80-1180)

8. **Throughput** - The throughput of Volatile Organic Compounds in the inks, hardeners, and thinners, combined, for the Tampo printing operation shall not exceed 2,147 pounds per year, calculated monthly as the sum of each consecutive 12-month period. The throughput of ethyl alcohol for the Tampo printing operation shall not exceed 720 gallons per year (4,752 pounds per year), calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
(9 VAC 5-80-1180)

EMISSION LIMITS

9. **Emission Limits** - Emissions from the operation of the test cells, combined, shall not exceed the limits specified below:

Nitrogen Oxides (as NO ₂)	0.3 lbs/hr	0.6 tons/yr
Carbon Monoxide	60.4 lbs/hr	132.2 tons/yr
Volatile Organic Compounds	36.0 lbs/hr	78.8 tons/yr

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits may be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Condition numbers 4, 5, 11, and 12.
(9 VAC 5-80-1180 and 9 VAC 5-50-260)

10. **Facility wide Emission Limits** - Total emissions from the outdoor power equipment manufacturing facility shall not exceed the limits specified below:

Mineral Spirits

Volatile Organic Compounds	6.5 tons/yr
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Tampo Printing Operation

Volatile Organic Compounds	3.4 tons/yr
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Total, facility-wide (including test cells)

Nitrogen Oxides (as NO ₂)	4.7 tons/yr
Carbon Monoxide	135.0 tons/yr
Volatile Organic Compounds	90.1 tons/yr

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits may be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Condition numbers 4, 5, 6, 7, 8, 11, and 12.
(9 VAC 5-80-1180 and 9 VAC 5-50-260)

11. **Visible Emission Limit** - Visible emissions from the facility exhausts shall not exceed five percent (5%) opacity except during one six-minute period in any one hour in which visible emissions shall not exceed twenty percent (20%) opacity as determined by the EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during malfunction.
(9 VAC 5-80-1180 and 9 VAC 5-50-80)

RECORDS

12. **On Site Records** - The permittee shall maintain records of emission data and operating parameters as necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Tidewater Regional Office. These records shall include, but are not limited to:
- a. Annual consumption of gasoline by the test cells, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
 - b. Records demonstrating compliance with the gasoline to lubricant ratio specified in Condition 4.
 - c. Annual throughput of **new** cleaning solution used in the degreasers (Unit Ref. No. M1295 and M1296), calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
 - d. Annual throughput of mineral spirits, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
 - e. Annual throughput of inks, hardeners, and thinners, combined, for the Tampo printing operation, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
 - f. Annual throughput of ethyl alcohol for the Tampo printing operation, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
 - g. Material Safety Data Sheets (MSDS), Certified Product Data Sheets (CPDS), or other vendor information as approved by DEQ showing VOC content and HAP content for each cleaning solution used in the degreasers (Unit Ref. No. M1295 and M1296).
 - h. Material Safety Data Sheets (MSDS), Certified Product Data Sheets (CPDS), or other vendor information as approved by DEQ showing VOC content and HAP content for the inks, hardeners, and thinners used in the Tampo printing process.

- i. Scheduled and unscheduled maintenance, and operator training.

These records shall be available for inspection by the DEQ and shall be current for the most recent five years.

(9 VAC 5-80-1180 and 9 VAC 5-50-50)

- 13. **Emissions Testing** - The permitted facility shall allow for emissions testing upon reasonable notice at any time, using appropriate methods. Sampling ports shall be provided when requested at the appropriate locations and safe sampling platforms and access shall be provided.

(9 VAC 5-50-30 F and 9 VAC 5-80-1180)

NOTIFICATIONS

- 14. **Initial Notifications** - The permittee shall furnish written notification to the Tidewater Regional Office of:

- a. The actual date on which modification of the facility to construct the Tampo printing operation commenced within 30 days after such date.
- b. The actual start-up date of the Tampo printing operation within 15 days after such date.

(9 VAC 5-50-50 and 9 VAC 5-80-1180)

GENERAL CONDITIONS

- 15. **Permit Invalidation** – This permit to modify the outdoor power equipment manufacturing facility shall become invalid, unless an extension is granted by the DEQ, if:

- a. A program of continuous modification is not commenced within the latest of the following:
 - i. 18 months from the date of this permit;
 - ii. Nine months from the date that the last permit or other authorization was issued from any other governmental entity;
 - iii. Nine months from the date of the last resolution of any litigation concerning any such permits or authorization; or
- b. A program of modification is discontinued for a period of 18 months or more, or is not completed within a reasonable time, except for a DEQ approved period between phases of a phased construction project.

(9 VAC 5-80-1210)

16. **Permit Suspension/Revocation** - This permit may be suspended or revoked if the permittee:
- Knowingly makes material misstatements in the permit application or any amendments to it;
 - Fails to comply with the conditions of this permit;
 - Fails to comply with any emission standards applicable to a permitted emissions unit, ;
 - Causes emissions from the stationary source which result in violations of , or interfere with the attainment and maintenance of, any ambient air quality standard; or
 - Fails to operate in conformance with any applicable control strategy, including any emission standards or emission limitations, in the State Implementation Plan in effect at the time an application for this permit is submitted.
- (9 VAC 5-80-1210 F)

17. **Right of Entry** - The permittee shall allow authorized local, state, and federal representatives, upon the presentation of credentials:
- To enter upon the permittee's premises on which the facility is located or in which any records are required to be kept under the terms and conditions of this permit;
 - To have access to and copy at reasonable times any records required to be kept under the terms and conditions of this permit or the State Air Pollution Control Board Regulations;
 - To inspect at reasonable times any facility, equipment, or process subject to the terms and conditions of this permit or the State Air Pollution Control Board Regulations; and
 - To sample or test at reasonable times.

For purposes of this condition, the time for inspection shall be deemed reasonable during regular business hours or whenever the facility is in operation. Nothing contained herein shall make an inspection time unreasonable during an emergency.
(9 VAC 5-170-130 and 9 VAC 5-80-1180)

18. **Maintenance/Operating Procedures** – At all times, including periods of start-up, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate the affected source, including associated air pollution control equipment, in a manner consistent with good air pollution control practices for minimizing emissions.

The permittee shall take the following measures in order to minimize the duration and frequency of excess emissions, with respect to process equipment which affect such emissions:

- Develop a maintenance schedule and maintain records of all scheduled and non-scheduled maintenance.
- Maintain an inventory of spare parts.
- Have available written operating procedures for equipment. These procedures shall be based on the manufacturer's recommendations, at a minimum.

- d. Train operators in the proper operation of all such equipment and familiarize the operators with the written operating procedures, prior to their first operation of such equipment. The permittee shall maintain records of the training provided including the names of trainees, the date of training and the nature of the training.

Records of maintenance and training shall be maintained on site for a period of five years and shall be made available to DEQ personnel upon request.

(9 VAC 5-50-20 E and 9 VAC 5-80-1180 D)

19. **Record of Malfunctions** – The permittee shall maintain records of the occurrence and duration of any bypass, malfunction, shutdown or failure of the facility or its associated air pollution control equipment that results in excess emissions for more than one hour. Records shall include the date, time, duration, description (emission unit, pollutant affected, cause), corrective action, preventive measures taken and name of person generating the record.
(9 VAC 5-20-180 J and 9 VAC 5-80-1180 D)
20. **Notification for Facility or Control Equipment Malfunction** - The permittee shall furnish notification to the Director, Tidewater Regional Office of malfunctions of the affected facility or related air pollution control equipment that may cause excess emissions for more than one hour, by facsimile transmission, telephone or telegraph. Such notification shall be made as soon as practicable but no later than four daytime business hours after the malfunction is discovered. The permittee shall provide a written statement giving all pertinent facts, including the estimated duration of the breakdown, within two weeks of discovery of the malfunction. When the condition causing the failure or malfunction has been corrected and the equipment is again in operation, the permittee shall notify the Director, Tidewater Regional Office.
(9 VAC 5-20-180 C and 9 VAC 5-80-1180)
21. **Violation of Ambient Air Quality Standard** - The permittee shall, upon request of the DEQ, reduce the level of operation or shut down a facility, as necessary to avoid violating any primary ambient air quality standard and shall not return to normal operation until such time as the ambient air quality standard will not be violated.
(9 VAC 5-20-180 I and 9 VAC 5-80-1180)
22. **Change of Ownership** - In the case of a transfer of ownership of a stationary source, the new owner shall abide by any current permit issued to the previous owner. The new owner shall notify the Director, Tidewater Regional Office of the change of ownership within 30 days of the transfer.
(9 VAC 5-80-1240)
23. **Permit Copy** - The permittee shall keep a copy of this permit on the premises of the facility to which it applies.
(9 VAC 5-80-1180)

